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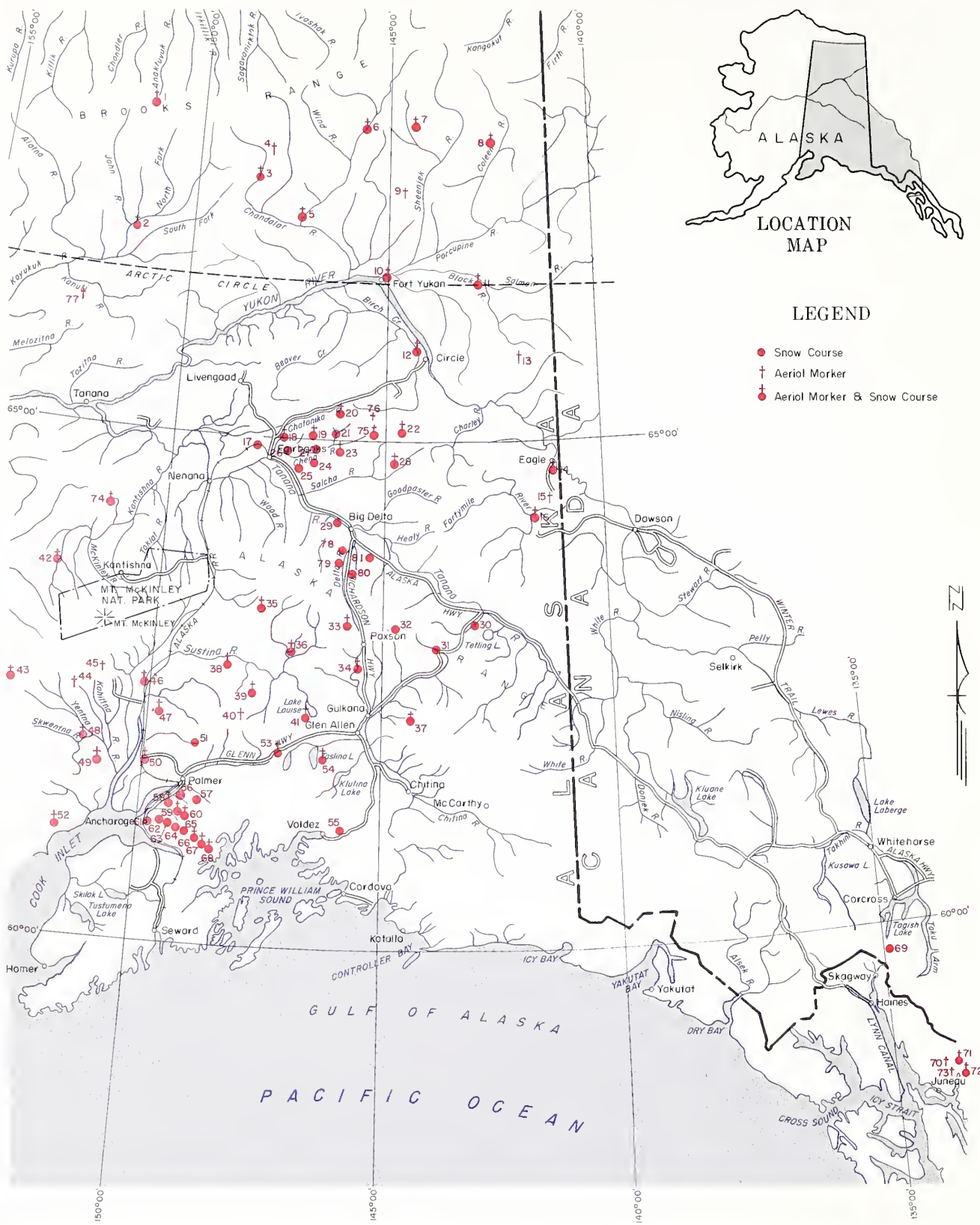
CURRENT SERIAL RECORDS

FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS
for
ALASKA

U. S. DEPARTMENT of AGRICULTURE , SOIL CONSERVATION SERVICE
and
ALASKA SOIL CONSERVATION DISTRICT

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Army Corps of Engineers, Alaska Power Administration, Alaska Highway Dept., Alaska Department of Fish and Game and University of Alaska, Greater Anchorage Area Borough, and others.

AS OF
MAY 1, 1968



SNOW SURVEYS

for

ALASKA

Report Prepared by

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Issued by

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

BLAINE O. HALLIDAY, STATE CONSERVATIONIST
P. O. BOX F, PALMER, ALASKA

INDEX OF ALASKA SNOW COURSES

MAP NO.	COURSE NAME	COURSE NO.	ELEV.	MAP NO.	COURSE NAME	COURSE NO.	ELEV.
1	Anaktuvuk Pass	51TT1A	2100	42	Lake Minchumina	52001A	730
2	Bettles Field	51RR1A	640	43	Farewell Lake	53NN1A	1090
3	Chandalar Lake	48SS1A	2040	44	Chelatna Lake	51NN1a	1650
4	Squaw Lake	48SS2a	2150	45	Peters Hills	50NN1a	2010
5	Venetie	46SS1A	610	46	Talkeetna	50NN2	350
6	Arctic Village	45TT1A	2300	47	Bald Mt. Lake	49NN1A	2150
7	Koness Lake	44SS1A	1790	48	Skwentna	51MM1A	158
8	Coleen River	42SS1A	1100	49	Alexander Lake	50MM1A	200
9	Vundik Lake	43SS1a	950	50	Willow Airstrip	59MM2	150
10	Fort Yukon	44RR1A	425	51	Independence Mine	49MM7	3300
11	Black River	42RR1A	650	52	McArthur	51LL1A	120
12	Circle City	44QQ3A	600	53	Sheep Mountain	45MM1	2700
13	Bull Lake	42QQ1a	950	54	St. Anne's Lake	46MM1A	1985
14	Eagle Village	41PP1A	900	55	Worthington Glacier	45MM2	2400
15	Boundary	41PP3A	3300	56	Moraine	48MM1	2100
16	Chicken Airstrip	41PP2A	1650	57	Ptarmigan	48MM2	3000
17	Yak Pasture	47PP1	540	58	Marmot	48MM8A	2000
18	Cleary Summit	47QQ1A	2230	59	Goat	48MM7A	3200
19	Little Chena	46QQ2A	2200	60	Grizzly	48MM4A	5000
20	Mt. Ryan	46QQ1A	2950	61	Arctic Valley #1	49MM1	500
21	Chena Hot Springs	46QQ3	1250	62	Arctic Valley #2	49MM2	1000
22	Big Windy	44QQ2A	3850	63	Arctic Valley #3	49MM3	2030
23	Munson Ridge	46PP1A	3100	64	Arctic Valley #4	49MM4	2330
24	French Creek	46PP2	2010	65	Arctic Ski Bowl	49MM5	3000
25	Little Salcha	46PP3	1500	66	Bird Creek	49MM6A	2350
26	Glenn Creek	47PP2	925	67	Ship Creek	49MM7A	1750
27	Colorado Creek	46PP4	750	68	Indian Pass	49MM8A	2350
28	Caribou Mine	45PP2A	1115	69	Log Cabin (B.C.)	35KK1	2880
29	Big Delta	45PP1	975	70	Upper Long Lake	33JJ2a	1000
30	Tok Junction	43001	1650	71	Long Lake	33JJ1A	1075
31	Mentasta Pass	43NN1	2430	72	Speel River	33JJ3A	275
32	Mankomen Lake	44NN1	3050	73	Crater Lake	33JJ4a	1750
33	Fielding Lake	45001A	3000	74	Wien Lake	55PP1A	1020
34	Haggard Creek	45NN1A	2540	75	Upper Chena	44QQ3A	3000
35	Monahan Flat	47001A	2710	76	Wolf Creek	44QQ4a	3850
36	Clearwater Lake	46NN1A	3100	77	Lake Todatonten	52RR1a	985
37	Sanford River	44NN2a	2280	78	Ft. Greely	45001	1420
38	Fog Lakes	48NN1A	2270	79	Meadows Road	45002	1570
39	Oshetna Lake	47NN1A	2950	80	Donnelly Dome	45003	2200
40	Little Nelchina	47NN2a	4160	81	Granite Creek	45004	1235
41	Lake Louise	46NN2A	2400				

MAY 1968

Snow cover in Alaska varies from well above normal in the Susitna and Koyukuk basins to considerably below normal in areas such as the Copper River drainage and portions of the Delta watershed. The Chena River drainage areas now has a below normal snowpack. Most other areas in the State are near average for May 1.

Snowfall was generally light over most of Alaska during the month of April. Substantial amounts, however, were received in the mountains of the Southeast Panhandle, to add to the deficient snowpack in that area. Cool weather has delayed significant snowmelt throughout the state.

Soils in the interior are dry and will absorb a substantial portion of the melting snow.

Three index snow stations on Wolverine Glacier, near Seward, and one on Eagle Glacier, near Anchorage, were measured by the U. S. Geological Survey in April and are reported in this bulletin.

YUKON above RAMPART

Snow surveys were not made in the Upper Yukon drainage on May 1 except at Log Cabin, B. C. According to April 1 measurements, however, snow conditions over most of this area are near normal. The exception to this is the Chandalar River drainage which has considerably more snow than average. Snow cover at the headwaters of the Yukon in Canada is well below normal.

TANANA-CHENA

Some additional snow fell in the Upper Chena drainage area during the last part of April and cool weather has delayed the snowmelt. Snowpack on the Chena, however, is only 88% of average and 69% of last year. Snow cover on the Tanana drainage varies from above average at the higher elevations in the Alaska Range to no snow in a large area around Big Delta. Most of the Tanana area, however, has a near normal snow cover.

MATANUSKA-SUSITNA-COPPER

Susitna watershed snow cover is considerably greater than normal. Some melting occurred at the lower elevations but snow depths on the higher courses increased during the past month. The greatest snow cover is found in the western portion of the Talkeetna Mountains and most of the area west of the Susitna River.

Lower elevation snow in the Copper and Matanuska drainage has melted. High elevation snowpack is near normal for May 1.

KUSKOKWIM

Snow surveys were not conducted in the Kuskokwim basin on May 1. Measurements taken in April indicate that snow cover in that region is well below normal.

KOYUKUK

Snow cover in the Upper Koyukuk drainage is heavy. Little snow fell in this area during the month of April but the excessive early winter snowfall in the Brooks Range of mountains should sustain a good river flow well into the summer.

COASTAL DRAINAGE

High elevation snow in the Chugach Mountains near Anchorage continued to increase during the past month. Low elevation snow in this area melted slowly and produced little runoff.

ALASKA SNOW SURVEYS

Previous

DRAINAGE BASIN AND SNOW COURSE	MAP NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT		YEARS OF RECORD
					LAST YEAR	AVERAGE *	
YUKON:							
Log Cabin	69	5/3/68	28	7.5	10.8	12.0	10
TANANA-CHENA:							
Yak Pasture	17	4/29/68	10	2.7	1.7	1.8	7
Cleary Summit	18	4/15/68A	26	6.5E	8.6	7.3	5
		4/29/68	30	7.2	9.9	7.8	7
Little Chena	19	4/15/68A	24	4.8	7.0	5.5	6
		5/1/68	19	5.1	8.2	6.4	6
Mt. Ryan	20	4/15/68A	27	5.9	10.7	8.9	6
		5/1/68	32	8.0	13.5	9.7	6
Chena Hot Springs	21	4/15/68A	21	4.2	--	--	--
		5/1/68	18	5.1	6.4	3.6	4
Big Windy	22	4/15/68A	17	3.4	5.0	4.4	5
		5/1/68	18	4.4	5.9	4.4	5
Munson Ridge	23	4/15/68A	44	11.4	15.9	16.1	6
		5/1/68	48	14.0	16.7	16.7	6
French Creek	24	4/29/68	21	6.9	12.1	8.6	6
Little Salcha	25	4/29/68	14	4.5	8.7	5.7	5
Glenn Creek	26	4/2/68	20	4.5	5.8	5.4	2
		5/6/68	7	2.0	--	--	1
Wolf Creek	76	4/15/68A	24	6.0	--	--	--
		5/1/68A	29	7.8	--	--	--
Upper Chena	75	4/15/68A	34	8.5	--	--	--
		5/1/68	38	10.2	--	--	--
Colorado Creek	27	5/1/68	14	3.5	6.0	5.4	2
Caribou Mine	28	4/15/68A	18	4.1	6.7	3.9	2
		5/1/68	13	3.4	7.1	5.9	2
Big Delta	29	4/29/68	0	0	0	0	7
Tok Junction	30	4/29/68	7	2.2	1.8	1.7	6
Mentasta Pass	31	4/29/68	22	6.1	7.2	6.4	6
Fielding Lake	33	4/30/68	50	14.2	9.1	12.4	7
Fort Greely	78	4/29/68	0	0	5.6	--	1
Meadows Road	79	4/29/68	0	0	4.0	--	1
Donnelly Dome	80	4/29/68	13	4.6	15.4	--	1
Granite Creek	81	4/29/68	7	1.7	--	--	0
Bonanza Creek	--	4/30/68	23	5.7	--	--	0
COPPER RIVER:							
Nankomen Lake	32	4/1/68	36	8.2	6.6	--	1
		5/1/68	36	7.8	7.8	--	1
Haggard Creek	34	4/30/68	24	5.9	6.2	5.9	2
Sanford River	37	4/30/68A	13	3.6E	1.3	--	1
St. Anne Lake	54	4/30/68	22	6.2	4.0	3.2	2
MATANUSKA-SUSITNA:							
Monahan Flat	35	4/30/68	38	9.8	7.2	7.2	3
Clearwater Lake	36	4/30/68A	19	4.9	4.0	3.9	3
Fog Lakes	38	4/30/68	23	5.8	4.0	2.6	3

(*) Average for Period of Record

ALASKA SNOW SURVEYS

Previous

DRAINAGE BASIN AND SNOW COURSE	MAP NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT		YEARS OF RECORD
					LAST YEAR	AVERAGE *	
MATANUSKA-SUSITNA (Continued)							
Oshetna Lake	39	4/30/68A	14	3.2	3.9	3.7	3
Little Nelchina	40	4/30/68A	21	5.5	--	--	--
Lake Louise	41	4/30/68	20	4.5	5.0	3.8	3
Chelatna Lake	44	4/30/68A	39	9.8	10.8	10.4	2
Peters Hills	45	4/30/68A	65	16.2E	--	--	--
Talkeetna	46	4/30/68	30	9.9	9.8	--	1
Bald Mtn. Lake	47	4/30/68	51	13.8	9.4	8.6	3
Skwentna	48	4/30/68	35	11.6	9.1	--	1
Alexander Lake	49	4/30/68	34	11.2E	11.2	9.2	2
Willow Airstrip	50	4/30/68	T	T	7.0	3.5	3
Independence Mine	51	No Measurement					
Sheep Mountain	53	4/29/68	15	4.2	3.7	3.2	10
COASTAL:							
McArthur	52	4/30/68A	59	21.2E	18.0	15.0	2
Worthington Glacier	55	4/29/68	68	25.2	9.6	20.8	10
Moraine	56	5/2/68	20	6.9	--	8.0	10
Ptarmigan	57	5/2/68	31	9.8	--	9.2	10
Marmot	58	No Measurement					
Goat	59	5/2/68	40	12.2	--	--	--
Grizzly	60	No Measurement					
Arctic Valley #1	61	5/1/68	0	0	0	0	3
Arctic Valley #2	62	5/1/68	T	T	0	0	3
Arctic Valley #3	63	5/1/68	20	4.1	4.1	3.9	3
Arctic Valley #4	64	5/1/68	15	4.1	4.9	4.4	3
Arctic Ski Bowl	65	5/1/68	38	12.5	15.4	13.4	3
Bird Creek	66	5/1/68	54	19.9	16.2	--	1
Ship Creek	67	5/1/68	34	10.0	9.4	--	1
Indian Pass	68	5/1/68	73	25.9	19.9	--	1
Eagle Glacier	--	4/18/68	161	66.5	--	--	--
Wolverine Glacier #1	--	4/4/68	99	39.4	--	--	--
Wolverine Glacier #2	--	4/7/68	142	59.4	--	--	--
Wolverine Glacier #3	--	4/10/68	195	83.9	--	--	--
SOUTHEAST ALASKA:							
Upper Long Lake	70	4/29/68	84	36.1	59.0	44.7	3
Long Lake	71	4/29/68	93	39.8	58.6	49.3	3
Speel River	72	4/29/68	50	21.4	47.0	33.4	3
Crater Lake	73	4/29/68	96	43.2	81.0	72.8	3
Douglas Ski Bowl	--	4/28/68	80	32.2	--	--	--

A - Aerial marker reading (*) Average for Period of Record

E - Estimated

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83707
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 Federal Office Building, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



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with the Snow Survey"*

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